

# CLAIMS

What is claimed is:

1. A method for authorizing access by a user to a resource over a wireless local area network, comprising the steps of:
  - 5        setting access privileges to the resource for a cluster of users of the wireless local area network;  
         receiving a request from a device controlled by the user to access the resource over the wireless local area network, the user having a membership in the cluster, and the request including a user identifier for the user and a device identifier for the device
  - 10      making the request;  
         locating access privileges based on the device identifier, the user identifier, and the cluster; and  
         authorizing a current session between the device and the resource based on the located access privileges.
- 15 2. A system comprising a digital processor for authorizing access by a user to a resource over a wireless local area network, the system comprising:
  - a gateway application executing on the digital processor for setting access privileges to the resource for a cluster of users of the wireless local area network; and
  - a communications interface coupled with the digital processor for receiving a
  - 20      request from a device controlled by the user to access the resource over the wireless local area network, the user having a membership in the cluster, and the request including a user identifier for the user and a device identifier for the device making the request,  
         the gateway application being responsive to the received request and locating access privileges based on the device identifier, the user identifier, and the cluster and
  - 25      the gateway application authorizing a current session between the device and the resource based on the located access privileges.

3. A computer program product that includes a computer usable medium having computer program instructions stored thereon for authorizing access by a user to a resource over a wireless local area network, such that the computer program instructions, when performed by a digital processor, cause the digital processor to:

5        set access privileges to the resource for a cluster of users of the wireless local area network;

         receive a request from a device controlled by the user to access the resource over the wireless local area network, the user having a membership in the cluster, and the request including a user identifier for the user and a device identifier for the device

10       making the request;

         locate access privileges based on the device identifier, the user identifier, and the cluster; and

         authorize a current session between the device and the resource based on the located access privileges.

15    4. A method for managing context information for a wireless local area network, comprising the steps of:

         receiving a request to access the resource over the wireless local area network, the request including a device identifier for a device making the request;

         locating context information associated with the device identifier, the context  
20    information associated with a previous session between the device and the resource; and

         providing the context information for use in a current session between the device and the resource.

5. The method of Claim 4, wherein the wireless local area network is based on a radio frequency suitable for use in local wireless communications.

25    6. The method of Claim 4, wherein communications over the wireless local area network are based on a spread-spectrum technique based on a carrier frequency greater

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than about 2,000 megahertz.

7. The method of Claim 4, wherein the device identifier is a unique identification number.

8. The method of Claim 4, wherein the context information includes an internet protocol address assigned to the device in the previous secure session.

9. The method of Claim 4, wherein the context information includes cluster information associated with a user of the device for the current session, the user having a membership in the cluster, and the cluster information providing access privileges associated with a member of the cluster who set the access privileges for the cluster in a previous request to access the resource.

10. The method of Claim 4, wherein the device is a voice-enabled communications device, and the gateway server is adapted for voice-enabled network communications.

11. A system comprising a digital processor for managing context information for a wireless local area network, the system comprising:

15 a communications interface coupled with the digital processor for receiving a request to access the resource over the wireless local area network, the request including a device identifier for a device making the request; and

a gateway application executing on the digital processor, in response to the received request, the gateway application locating context information associated with the device identifier, the context information associated with a previous session between the device and the resource, and providing the context information for use in a current session between the device and the resource.

12. The system of Claim 11, wherein the wireless local area network is based on a radio

frequency suitable for use in local wireless communications.

13. The system of Claim 11, wherein communications over the wireless local area network are based on a spread-spectrum technique based on a carrier frequency greater than about 2,000 megahertz.

5 14. The system of Claim 11, wherein the device identifier is a unique identification number.

15. The system of Claim 11, wherein the context information includes an internet protocol address assigned to the device in the previous secure session.

10 16. The system of Claim 11, wherein the context information includes cluster information associated with a user of the device for the current session, the user having a membership in the cluster, and the cluster information providing access privileges associated with a member of the cluster who set the access privileges for the cluster in a previous request to access the resource.

15 17. The system of Claim 11, wherein the device is a voice-enabled communications device, and the gateway server is adapted for voice-enabled network communications.

18. A computer program product that includes a computer usable medium having computer program instructions stored thereon for managing context information for a wireless local area network, such that the computer program instructions, when performed by a digital processor, cause the digital processor to:

20 receive a request to access the resource over the wireless local area network, the request including a device identifier for a device making the request;

locate context information associated with the device identifier, the context information associated with a previous session between the device and the resource; and

provide the context information for use in a current session between the device and the resource.

19. A method for balancing a load among a plurality of wireless subnetworks, comprising the steps of:

5 receiving an indication that a device has established a first connection with a first wireless subnetwork, the device having a device identifier;

determining a user service level associated with the device based on the device identifier and based on a load level for the first wireless subnetwork in comparison to load levels associated with each of the other wireless subnetworks available for

10 connection by the device; and

if a second connection provides a preferable balancing of load levels among the wireless subnetworks, then directing the device to establish the second connection with a second wireless subnetwork based on the determined user service level and the load level of the first wireless subnetwork,

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20. A system comprising a digital processor for balancing a load among a plurality of wireless subnetworks, the system comprising:

a communications interface coupled with the digital processor for receiving an indication that a device has established a first connection with a first wireless

20 subnetwork, the device having a device identifier; and

a gateway application executing on the digital processor for determining a user service level associated with the device based on the device identifier and based on a load level for the first wireless subnetwork in comparison to load levels associated with each of the other wireless subnetworks available for connection by the device, and in

25 response to a second connection providing a preferable balancing of the load levels among the wireless subnetworks, the gateway application directing the device to establish a second connection with a second wireless subnetwork based on the user service level and the load level of the first wireless subnetwork.

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5 a digital processor, cause the digital processor to:

receive an indication that a device has established a first connection with a first wireless subnetwork, the device having a device identifier;

determine a user service level associated with the device based on the device identifier and based on a load level for the first wireless subnetwork in comparison to 10 load levels associated with each of the other wireless subnetworks available for connection by the device; and

direct the device to establish a second connection with a second wireless subnetwork based on the user service level and the load level of the first wireless subnetwork, if the second connection provides a preferable balancing of load levels among the wireless subnetworks.